

CUBE™ RGBA

User Manual

Battery Powered Wireless DMX LED Fixture

Or

Battery Powered LED Fixture – (Without DMX Built inside)



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BA

Lighting

CUBE™ RGBA

WIRELESS DMX

CE

Please read over this manual before operating the light

Most important: FIRST CHARGE THE FIXTURES FOR 6-8 Hours on the First Charge before use. Plug in Power cord. Turn off Power Switch and Turn other switch to charge.

Introduction

Unpacking: Thank you for purchasing the CUBE™ RGBA. Every CUBE™ RGBA has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit has arrived intact. In the case damage has been found or parts are missing, please contact the manufacturer or your dealer for further instructions. Do not return this unit to your dealer without first contacting.

Introduction: The CUBE™ RGBA is a DMX intelligent and battery powered LED par light. This par light is light weight and compact which makes it a great piece for mobile DJ's and clubs.

Warning! To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

Caution! There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufacturer's warranty. In the unlikely event your unit may require service please contact the manufacturer or your dealer.

PLEASE recycle the shipping carton whenever possible.

General Instructions

To optimize the performance of this product, please read these operating instructions carefully to familiarize you with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit, for future reference.

Features

- Multi-colors
- Control Channels: 4/8CH
- Color Strobe
- Master/Slave synchronization
- DMX-512 protocol
- Electronic Dimming 0-100%
- Operating Modes: Sound activation, Auto and DMX control mode
- Led operation menu with function buttons
- Daisy Chain Units Together in DMX Mode
- 1-20 flashes/sec strobe effect

Safety Precautions

- To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
- Do not spill water or other liquids into or on to your unit.
- Be sure that the local power outlet matches that of the required voltage for your unit.
- Do not attempt to operate this unit if the power cord has been frayed or broken. Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Disconnect from main power before making any type of connection.
- Do not remove the cover under any conditions. There are no user serviceable parts inside.
- Never operate this unit when its cover is removed.
- Never plug this unit in to a dimmer pack.
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- Do not attempt to operate this unit, if it becomes damaged.
- This unit is intended for indoor use only; use of this product outdoors voids all warranties.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the point they exit from the unit.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See "Cleaning" for details.
- Heat -The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the appliance.
 - C. The appliance has been exposed to rain or water.
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance
- Fuse standard is2A/250V
- Grounded using yellow/green line
- The ambient temperature must always be under +35° C

Set Up

Power Supply: Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your CUBE™ RGBA. The CUBE™ RGBA is workable in 100-220V/50~60Hz. Because line voltage may vary from venue to venue, you should be sure your unit voltage matches the wall outlet voltage before attempting to operate you fixture.

Operating Instructions

Operating Modes: You can use the CUBE™ RGBA in 5 ways:

- Sound activation – The unit will activated by the sound signal.
- Static display – The unit will display the color in static way.

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- Auto Mode - The unit will automatically chase through the different patterns.
 - DMX control mode - This function will allow you to control the lighting with a standard DMX 512 controller.
 - Battery powered – This function will allow you to control the lighting independently without any DMX cable

DMX Mode: Operating through a DMX controller give the user the freedom to create their own programs tailored to their own individual needs. This function also allows you to use your fixtures as pattern changing lights.

1. This function will allow you to control each individual fixture's traits with a standard DMX 512 controller.
2. The CUBE™ RGBA uses 6 DMX channels to operate. Please see "DMX Values and Functions" for the DMX traits.
3. To run your fixture in DMX mode, plug in the fixture via the XLR connections to any standard DMX controller. Set your desired DMX address following the setup specifications that come with your DMX controller.
4. The unit can automatically recognize the DMX signal once the DMX connection is done.

DMX Linking: To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

DMX Values and Functions

4CH Mode

	Value	RGBA 10mm 198
CH1	0-255	RED dimmer (0-255)
CH2	0-255	GREEN dimmer (0-255)
CH3	0-255	BLUE dimmer (0-255)
CH4	0-255	AMBER dimmer (0-255)

8CH Mode

	Value	RGBA 10mm 198
CH1	0-255	RED dimmer (0-255)
CH2	0-255	GREEN dimmer (0-255)
CH3	0-255	BLUE dimmer (0-255)
CH4	0-255	AMBER dimmer (0-255)
CH5	0-255	R, G, B, A dimmer (0-255)
CH6	0-255	Auto Slow to Fast (0-255)

CH7	0-255	R, G, B, A STROBE from slow to fast (0-255)
CH8	0-255	SOUND (Off 0-15 ON 16-255)

LED Operation Menu:

Touch Buttons

There are four touch buttons under the LED Alpha-numerical display: Menu, Down, Up, Enter. Normally, the LED will display the current DMX address code of the fixture. At this time, presses Menu to choose the function you want to set up. Press and hold Up or Down to fast scrolling within the menu options. When an options flashing the LED display, press Enter to confirm and Menu to exit.

After initialization, the unit is ready for setting and working. Please see the following table for setting information

Display	Function			
ADDR	DMX Address (0-512)			
CHMD	4CH/8CH			
SLND	NAST	Master		
	SLAL	Slave		
SHND	SOND	Sound control		
	COLO	Color choose 1-15		
		Auto operation		
	FADE	Running Speed (SP1-SP8)		
NANU	Red (0-255)			
	Green (0-255)			
	Blue (0-255)			
	Amber (0-255)			
TEST	Quality Control			
FHRS	Operating Hours			

For Battery Function and Charge

The unit has the function of battery powered. The button for battery and charge is set on the rear panel. It is showed as the following picture, and the function is described as below.



(1) Touch switches

(3) DMX-In socket

(5) Power switch

(7)POWER IN

(9) Fuse holder 250v 2A

(11).GND

(13) Mic

(2) Alpha-numeric display

(4) DMX-Out socket

(6) Battery switch

(8) POWER OUT

(10) BAT fuse 250v 5A

(12).BAT Indicator

There are two buttons on the rear panel of the lighting. One is for power, and the other is for battery.

- When use the fixture with DMX, not battery, please switch the button for power to "on", and switch the button for battery to "bat off".
- When use the fixture with battery instead of DMX, please switch the button for power to "off", and also switch the button for battery to "bat on".
- When charge the light, please switch the button for battery to "charge". At the same time, if the switch for power is "on", the light will be at work during the process of charge, but will consume some power from the charge; if the switch for power is "off", the light will be blackout and not be at work.

Tip for the battery and charge:

- The battery can last for 6 hours when all LEDs on after full charge , and can last for more than 10 hours on auto running mode.
- It is suggested to charge the battery for at least 8 hours, which will extend the life span of

the battery.

- At the bottom of the fixture, there is a little hole which is the indicating light for the charge. When charge the light, the indicating light will be in red, and when charged full, it will be in green.

For wireless receiver

Wireless Module of DMX512

MODE: PCB-WI-DMX

Brief:

DMX512 wireless receiver/transmitter transmits standard DMX512 protocol data (generated by console)by wireless way, which solves lighting control issues of wireless transmitting completely between console and lighting, lighting and lighting and so on, It get rid of connecting cable limited completely

And also can ensure without any time delay when signal data is transmitting, signal data is real time and reliably.

This product adopt 2.4G ISM frequency section(global opening section) without permission limited

High effective GFSK modulate ,communication design ; 126 channels jumping frequency automatically, high anti-jamming ability.

Application: Upgrade DMX512 stage lighting

PCB Hole:

CUBE™
RGB
WIRELESS DMX



(1) Antenna

(3) Wireless indicator

(2)Power switch for wireless receiver

(4)ID code selector

Product feature:

1. Product name: 2.4G wireless DMX512 R/T molding board
2. Small size, Easy to suit for interior of accessed lighting
3. Single key to operate, tricolor LED displaying
4. Transmitting standard DMX512 protocol data of console, also can transmit lighting and lighting DMX512 protocol data.
5. 126 channels jumping frequency automatically, high anti-jamming ability. to ensure works reliability
6. 7 groups ID code settable, User can use 7 groups individual wireless net without any interfere each other in the same place..
7. Input voltage: 5VDC
8. Work frequency section: 2.4G ISM,126 channels frequency section
9. Max transmitting power rate: 20dBm
10. Receiver sensitive: -94dBm
11. Signal port: RS485 or CPU séries port AURT

Compatible series product as follows:



Wireless transmitter

Operating manual:

1. ID code and LED color corresponding relationship:

- 1: RED
- 2: GREEN
- 3: RED+GREEN
- 4: BLUE
- 5: RED+BLUE
- 6: GREEN+BLUE
- 7: RED+GREEN+BLUE

2. Press button on transmitter to select group to match corresponding color on the receiving fixture.

- LED constant lit up: no DMX or wireless signal.
- Red LED flash: transmitting.
- Green LED flash: receiving

3. RF frequency- ----- 2. 400-2. 525 Ghz, total 126 channels, it's searching automatically,

Establishing Communication:

1. Power on DMX512 wireless received board and transmitted board.
2. Press button to set same color of transmitted board and received board., please use

different ID value if you need use more than 1 group wireless net at same time in same place.

3. The red LED flashes when transmitter transmits DMX data by no interfered frequency section, then receiver changes communicated frequency section. Green LED flash till received corrected same ID value, LED flash more fast once DMX data more fast.
4. Communication was established correctly then

Caution:

- ❖ Don't repair this R/T board by yourself, it should be returned to manufacturer to repair if any problems.

Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth every 20 days.
3. Always be sure to dry all parts completely before plugging the unit back in.
Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

Trouble Shooting

Listed below are a few common problems the user may encounter, with solutions.

Unit does not respond to DMX:

1. Check that the DMX cables are connected properly and are wired correctly (pin 3 is "hot"; on some other DMX devices pin 2 may be 'hot'). Also, check that all cables are connected to the right connectors, it does matter which way the inputs and outputs are connected.

Unit does not respond to sound:

1. Quiet or high pitched sounds will not activate the unit. If problems are not resolved, contact your dealer for service.

4.

Specifications

Model: CUBE™ RGBA

Battery powered and DMX LED lighting fixture

LED display

Working Position: Any safe working position

Power Supply: Switching power supply

Voltage: AC 100-220V /50~60Hz

Power Consumption: 20W

Colors: RGBA Color Mixing

LED: 198pcs of high brightness 10mm LED, Red, Green and Blue each 48pcs, Amber54pcs

Warranty: 1 Year

Note: All information is subject to change without prior notice.

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